TECHNICAL NOTES
LAKE STATES FOREST EXPERIMENT STATION
UNIVERSITY FARM ST. PAUL, MINNESOTA

Light Cuttings in Hardwoods Show High Quality Increment

The advantages of light cuttings in increasing quality growth of the residual stand were brought out by the analysis of three of the experimental cuttings (light, moderate, and heavy) that have been in effect for ten years at the Upper Peninsula Experimental Forest. In the heavy cutting the growth was mostly on small saplings, in the moderate cutting it was distributed over quite a range of diameters, and in the light cutting growth was concentrated on large trees.

The extensive mill-scale studies carried on a number of years ago in connection with selective logging established a definite relationship between diameters of trees and value of the lumber per M feet cut from them. By applying these values to the increment obtained in the three types of cutting, the growth per acre per year was computed to be worth $4.25 for the light cutting, $2.67 for the moderate cutting, and $0.68 for the heavy cutting. These differences are further accentuated by the fact that the value given for the light cutting could be realized immediately if it were necessary to cut it, whereas that from the heavy cutting is scarcely realizable at all, since the stand is too poorly stocked to warrant returning for a second cut within a reasonable period. Despite the fact that the mill-scale values may be somewhat changed today, the relationships remain the same, and it is perfectly clear that the light cutting has given much the best results in quality growth. In order to gain the advantage of such quality growth the trees left should be relatively sound and free of defect.

No. 166 May 1940

Assistance in the preparation of this material was furnished by the personnel of Work Projects Administration, O.P. 665-71-3-69, Sponsor, University of Minnesota, and O.P. 01-2-71-126, Sponsor, Lake States Forest Experiment Station.

MAINTAINED BY THE UNITED STATES DEPARTMENT OF AGRICULTURE IN COOPERATION WITH THE UNIVERSITY OF MINNESOTA